



Cambridge International AS & A Level

ACCOUNTING

9706/31

Paper 3 Structured Questions

May/June 2021

INSERT

3 hours

INFORMATION

- This insert contains all of the required information and questions. The questions are provided in the insert for reference only.
- You may annotate this insert and use the blank spaces for planning. **Do not write your answers** on the insert.



This document has **12** pages.

Section A: Financial Accounting

Question 1

Source A1

G Limited manufactures luxury sofas. In 2020, it also started trading in standard sofas which are purchased from local suppliers.

The following balances were extracted from the books of G Limited at 31 December 2020.

	\$
Revenue from luxury sofas	944 000
Revenue from standard sofas	175 000
Purchases of raw materials	292 000
Purchases of standard sofas	158 600
Direct wages	200 200
Indirect manufacturing expenses	108 000
Administrative expenses	206 000
Selling and distribution costs	123 000
Machinery	
cost	325 000
accumulated depreciation at 1 January 2020	155 000
Inventories at 1 January 2020	
Raw materials	66 000
Work in progress	42 600
Finished goods – luxury sofas (at transfer price)	126 000

The following information is also available.

- 1 The mark-up on cost of production for 2019 was 20%. It was increased to 25% in 2020.
- 2 Inventories at 31 December 2020:

	\$
Raw materials	72 000
Work in progress	54 000
Finished goods	
luxury sofas (at transfer price)	150 000
standard sofas	16 000

- 3 The selling and distribution costs included:

	\$
Transportation of raw materials	7 800
Installation of new machinery	5 000

- 4 Factory rent, \$48 000, had been included in the administrative expenses.
- 5 Machinery is to be depreciated at an annual rate of 20% using the reducing balance method.

Answer the following questions in the question paper. Questions are printed here for reference only.

- (a) Prepare the manufacturing account for the year ended 31 December 2020. [8]
- (b) Prepare the provision for unrealised profit account for the year ended 31 December 2020. [3]
- (c) Explain the treatment of unrealised profit in G Limited's statement of financial position at 31 December 2020. Your answer should refer to relevant accounting concepts. [5]
- (d) Prepare the trading section of the income statement for the year ended 31 December 2020 showing separately the gross profit from **each** of luxury sofas and standard sofas. [4]

Additional information

The directors have the opportunity in 2021 of buying in the luxury sofas which would sell at a gross profit margin of 20%. They are considering two options:

Option 1 continue manufacturing luxury sofas without buying in

Option 2 cease production and buy in luxury sofas for resale

- (e) Advise the directors which option to choose. Justify your answer and support the answer with calculations. [5]

[Total: 25]

Question 2**Source A2**

The following information relates to D Limited for the year ended 31 December 2020.

Revenue	\$1 051 200
Purchases	\$642 400
Gross profit margin	40%
Non-current asset turnover	2.4 times
Current ratio	2.2 : 1
Trade receivables turnover	33 days
Trade payables turnover	45 days

All sales and purchases were on credit.

The value of closing inventory was 20% higher than the opening inventory.

Current assets consisted of inventory, trade receivables and cash and cash equivalents.

Current liabilities consisted of trade payables only.

Answer the following questions in the question paper. Questions are printed here for reference only.

- (a) Prepare the total assets section of the statement of financial position at 31 December 2020, showing the cash and cash equivalents as the balancing figure. Use the space provided to show your workings. [9]
- (b) Calculate the working capital cycle (in days). [3]

Additional information

The following accounting ratios for **2019** are also available.

Non-current asset turnover	2.05 times
Working capital cycle	30 days

- (c) Compare the performance of D Limited over **both** years by considering the non-current asset turnover **and** working capital cycle. [3]

Additional information

The price earnings ratio of D Limited has increased from 2019 to 2020.

- (d) Explain **two** possible reasons for the change in the ratio from 2019 to 2020. [6]
- (e) State **four** limitations of ratio analysis. [4]

[Total: 25]

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Question 3

Source A3

Adul and Basha have been in partnership for many years. On 31 December 2020, the partnership business merged with Carl's business.

The proposal for the merger was made six months before it took place. One of the conditions for the merger was that Carl's accounting system had to be computerised.

Answer the following questions in the question paper. Questions are printed here for reference only.

- (a) State **four** benefits of a computerised accounting system to a business. [4]

Additional information

The draft statements of financial position for both businesses at 31 December 2020 were as follows.

	Adul and Basha \$	Carl \$
Office equipment	564 000	265 000
Motor vehicles	98 200	65 000
Inventory	46 000	28 000
Trade receivables	83 300	36 000
Cash and cash equivalents	21 200	9 000
Total assets	<u>812 700</u>	<u>403 000</u>
Capital account		
Adul	360 000	
Basha	360 000	
Carl		371 100
Current account		
Adul	22 000	
Basha	(5 600)	
	<u>736 400</u>	<u>371 100</u>
Trade payables	<u>76 300</u>	<u>31 900</u>
Total equity and liabilities	<u>812 700</u>	<u>403 000</u>

- 1 Profit for the year ended 31 December 2020 was:

	\$
Adul and Basha	64 000
Carl	21 160

- 2 The goodwill for the partnership had been valued at \$50 000. The goodwill value for Carl's business was to be the average profit for the last three years. Carl's profit had increased by 15% each year for the last three years.

- 3 All assets and liabilities were valued at their net book value except:

	Adul and Basha	Carl
	\$	\$
Office equipment	580 000	230 000
Motor vehicles	88 000	62 000
Trade receivables		35 000

- 4 There was no partnership agreement between Adul and Basha. After the merger, it was agreed that the profit and loss sharing ratio among Adul, Basha and Carl would be 2 : 2 : 1.
- 5 All the partners agreed that the combined goodwill would not be maintained in the books of account of the new partnership.
- 6 Two motor vehicles had an equal value in the business of Adul and Basha. Immediately after the merger, Adul would take one of the motor vehicles for his own use.
- (b) Calculate the goodwill of Carl's business. [2]
- (c) Explain why the calculation of Carl's goodwill is based on the profit of the business. [2]
- (d) Prepare a statement showing the movement in the capital account for **each** of Adul, Basha and Carl immediately after the merger. [6]
- (e) Calculate the value of the total assets of the new business immediately after the merger. Show your workings. [6]

Additional information

Better profitability of the business of Adul and Basha is one of the reasons for Carl's decision to merge.

- (f) Advise Carl whether or not he has made the correct decision to merge with the partnership business. Justify your answer using **both** financial and non-financial factors. [5]

[Total: 25]

Question 4

Source A4

Tan owns a shop in her local town selling ornaments.

Tan and Wang entered a joint venture to sell ornaments in a city festival market in 2020. Tan purchased goods from her local producers in a small town and Wang sold the products in his local city. Profit will be shared equally and each party would record their own transactions.

The receipts and payments relating to the joint venture were as follows:

	Tan \$	Wang \$
Purchases of goods	46 000	
Rent of stall		12 000
Cash register		2 600
Transportation	2 450	980
Assistant's wages	2 770	5 400
Sales		95 400
Packaging	620	4 080

At the end of the joint venture, Wang took over the cash register and unsold ornaments at the value of \$2000 and \$3100 respectively.

Answer the following questions in the question paper. Questions are printed here for reference only.

- (a) State **three** features of a joint venture. [3]
- (b) Prepare the following accounts:
- (i) the joint venture account [7]
- (ii) the joint venture with Tan account in Wang's books [4]
- (iii) the joint venture with Wang account in Tan's books [3]

Additional information

From Tan's experience of the joint venture in the city festival market, she has found that the goods are well accepted by the city people. She now plans to sell the ornaments in the city through Wang as a consignee.

- (c) Explain **two** benefits to **each** of Tan and Wang of selling the ornaments in the city on consignment. [8]

[Total: 25]

Section B: Cost and Management Accounting

Question 5

Source B1

N Limited produces and sells one product. The product has a unit selling price of \$160. The budgeted sales for July and August are as follows:

	July	August
	\$	\$
Budgeted sales	198 400	240 000

The following information is available.

- Cash sales are 20% of total sales in all months. The remainder are credit sales receivable in the following month. The actual sales for June were \$214 000.
- N Limited intends to achieve the following inventory level at the end of each month.

	July	August
Units	300	200

N Limited had 240 units in inventory on 30 June.

- Raw materials are purchased in the month of production. Each unit requires 5 kilos of raw materials at \$18 per kilo. To get a 2% cash discount, N Limited pays its suppliers in the month of purchase.
- Direct wages are \$40 per unit, payable in the month in which they are incurred. In any month where sales exceed \$200 000, workers are paid a total bonus of 10% on the excess. The bonus is paid one month after the relevant sale.
- Fixed overhead for June was \$60 000. It is expected to increase by 5% from July. Of these, 60% of overhead is paid in the month it is incurred and the remainder in the following month.
- A new machine at a cost of \$40 000 is to be purchased in August.
- Cash at bank at 1 July is expected to be \$80 600.

Answer the following questions in the question paper. Questions are printed here for reference only.

- State **two** benefits of preparing a cash budget. [2]
- Prepare a production budget (in units) for **each** of the months July and August. [4]
- Prepare a cash budget for **each** of the months July and August. [11]

Additional information

N Limited wishes to improve the cash position at the end of August and wants to have a minimum ending bank balance of \$24 500. To achieve this, one of the directors proposes that a cash discount of 4% be offered to some of the credit customers in August so that they will make an early payment in August.

- (d) Calculate the minimum amount of credit sales to be offered the cash discount in order to achieve an ending bank balance of \$24 500. [4]
- (e) Explain **two** other methods to improve the cash position at the end of August. [4]

[Total: 25]

Question 6

Source B2

The directors of W Limited plan to buy a new machine costing \$220 000 for making a new product. The machine will have a useful life of 4 years with no scrap value.

The cash inflows and cash outflows from the new product for four years are expected to be as follows:

	Inflows	Outflows
	\$	\$
Year 1	100 000	36 000
Year 2	132 000	50 000
Year 3	160 000	68 000
Year 4	92 000	50 000

The cost of capital is 8%.

The following discount factors are given:

	8%	12%
Year 1	0.926	0.893
Year 2	0.857	0.797
Year 3	0.794	0.712
Year 4	0.735	0.636

Answer the following questions in the question paper. Questions are printed here for reference only.

(a) Calculate for the new machine:

- (i) the accounting rate of return (ARR) [5]
- (ii) the net present value (NPV) [3]
- (iii) the internal rate of return (IRR) [4]

(b) Advise the directors whether or not they should buy the new machine. Justify your answer. [3]

Additional information

The directors are of the view that the NPV method should be used to make decisions on investment.

(c) State **three** advantages of using the NPV method. [3]

Additional information

Due to a change in economic conditions, the directors consider that the cost of capital should be 12%.

(d) Explain the effect on the directors' decision on investment of the change in the cost of capital. [2]

Additional information

The directors also consider that the negative impact from the increase of cost of capital can be offset by increasing the revenue. Additional advertising costing \$20 000 incurred in year 1 can help increase the sales revenue in years 2 and 3. Year 2 sales revenue is expected to increase by \$24 000.

- (e) Calculate the minimum increase in sales revenue in year 3 to justify the directors deciding to buy the new machine. [5]

[Total: 25]

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